

FIG. 3 is a SSNMR spectrum of SAPO-34 catalyst containing various hydrocarbons and alkylated single ring aromatics within the porous framework at various conditions;

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FIG. 4 is a plot comparing conversion of methanol by contacting methanol to SAPO catalysts with and without an integrated hydrocarbon co-catalyst; and

FIG. 5 is a plot of olefin selectivity for methanol reactions by contacting methanol to SAPO catalysts with and without an integrated hydrocarbon co-catalyst.

Please replace the paragraph at page 12, line 1 through page 12, line 12, with the following replacement paragraph:

B2
The hydrocarbon material that is contacted with or introduced into the silicoaluminophosphate molecular sieve must be capable of being converted to an integrated hydrocarbon co-catalyst which may be a single ring aromatic compound. The desired aromatic composition can be identified by Solid State Nuclear Magnetic Resonance (SSNMR) spectra comprising a peak in the 18-40 ppm region and a peak in the 120-150 ppm region. Preferably, the aromatic composition is selected from the group consisting of alkyl substituted, single ring aromatics. Alternatively, if the intensity of the peak in the 18-40 ppm region is negligible, a single peak near 128 ppm also indicates a useful material of this invention, as this indicates the presence of benzene. Benzene also has the desired effect on catalytic activity, as it rapidly reacts with the oxygenate to make alkylated single ring aromatics.

Please replace the paragraph at page 13, line 3 through page 13, line 20, with the following replacement paragraph:

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Hydrocarbon is introduced into the silicoaluminophosphate molecular sieve by contacting the silicoaluminophosphate molecular sieve or catalyst containing the silicoaluminophosphate molecular sieve with hydrocarbon in a pretreatment zone at conditions effective to form a composition comprising an integrated hydrocarbon co-catalyst which may be at least one single ring aromatic compound

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within the molecular pore structure of the silicoaluminophosphate molecular sieve. Within the pretreatment zone the conditions are such that an amount of an integrated hydrocarbon co-catalyst which may be a single ring aromatic will be formed within the silicoaluminophosphate molecular sieve pore structure that is effective in enhancing selectivity to ethylene or propylene in an oxygenate to olefin reaction process. The activity of a pretreated catalyst for oxygenate conversion can be expected to increase by a factor of at least about 20% relative to an untreated catalyst. The selectivity to ethylene or propylene of a pretreated catalyst in the oxygenate conversion reaction can be expected to increase by at least about 2 wt. %. Preferably, the an integrated hydrocarbon co-catalyst which may be a single ring aromatic will occupy at least 0.1 vol.% of the pore structure; more preferably, at least 10 vol.%; most preferably, at least 25 vol.% the molecular pore structure.

Please replace the paragraph at page 24, line 21 through page 24, line 24, with the following replacement paragraph:

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FIG. 5 shows the selectivity to C₂-C₄ olefins in the same experiment as described for FIG. 4. The increase in prime olefin selectivity for methanol conversion for the catalyst of the invention, particularly the increase in ethylene selectivity, is shown to be about 10 wt.% or greater at any point in the experiment.

IN THE CLAIMS:

Please amend the claims as follows. A marked-up version of the claims is attached in APPENDIX B: "CLAIMS MARKED-UP TO SHOW CHANGES MADE."

- B4
17. A method of making an olefin product from an oxygenate feedstock, comprising:
- (a) contacting a silicoaluminophosphate molecular sieve having a porous framework structure with a hydrocarbon at conditions effective to form at